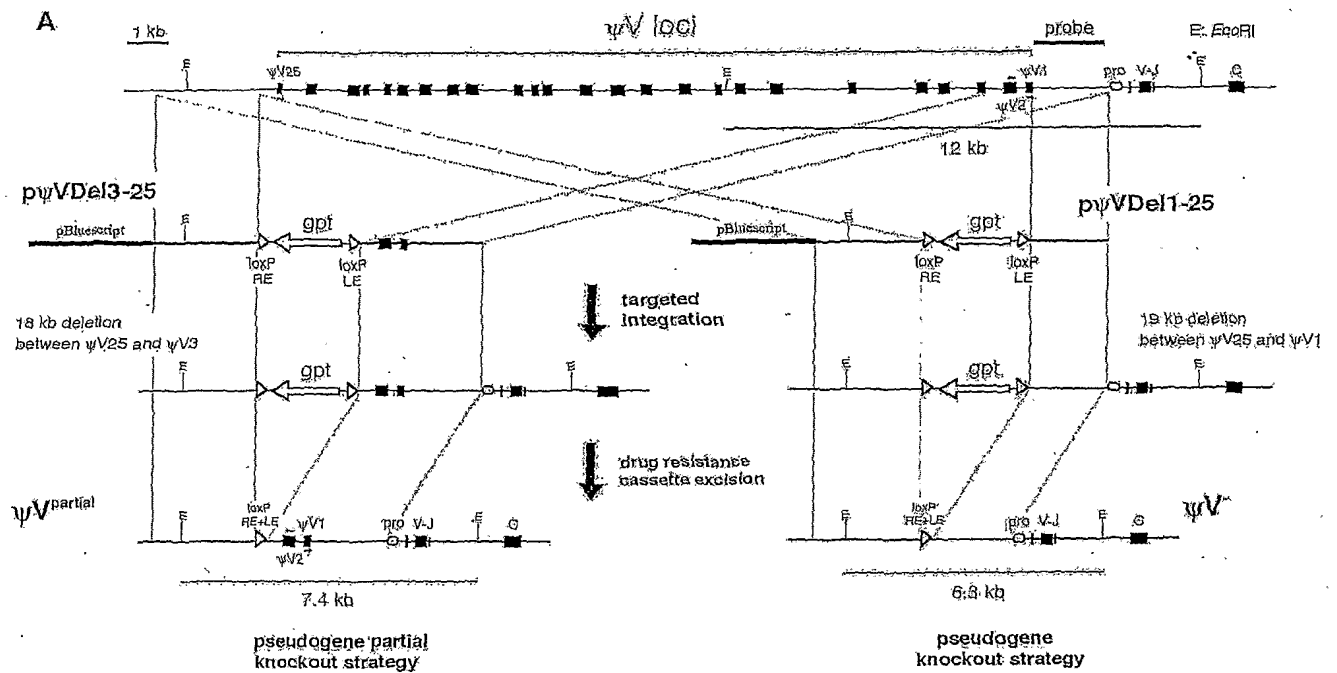
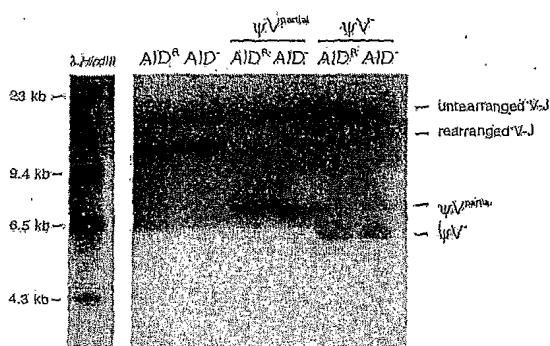


Table 1 Mutation profile

Cell line	Gene	Mutation ratio		Frequency: mutation/bp ($\times 10^{-3}$)	Mutated sequences /total	Type of mutation			
		Mutation events	Total bp sequenced			Point mutation (non- templated)	Gene conversion	Deletion	Insertion
AID ^R Ψ V ⁻	VJ	135	45220	2,99	70 / 95 (73,7%)	133	-	2	0
	Bu-1	1	47500	0,02	1 / 95 (1,1%)	0	-	1	0
	EF1 α	2	42720	0,05	2 / 89 (2,2%)	2	-	0	0
	VJC (cDNA) from sorted IgM								
	(-)	245	80276	3,05	87 / 94 (92,6%)	239	-	5	1
AID ^{-/-} Ψ V ⁻	VJ	0	45220	0,00	0 / 95 (0,0%)	0	-	0	0
AID ^R Ψ V ^{par}	VJ	110	46354	2,37	65 / 98 (66,3%)	87 (80)	18	4	1
AID ^{-/-} Ψ V ^{pa}	VJ	3	43516	0,07	3 / 92 (3,3%)	3	0	0	0
AID ^R	VJ	112	25960	4,31	55 / 55 (#####)	39 (9)	72	1	0
AID ^{-/-}	VJ	3	39732	0,08	3 / 84 (3,6%)	3	0	0	0
XRCC3 ^{-/-}	VJ	56	44462	1,26	38 / 94 (40,4%)	55 (40)	1	0	0



B



C

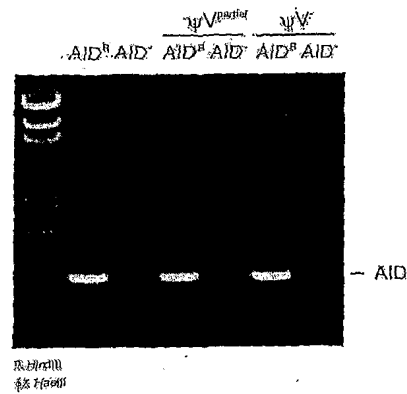
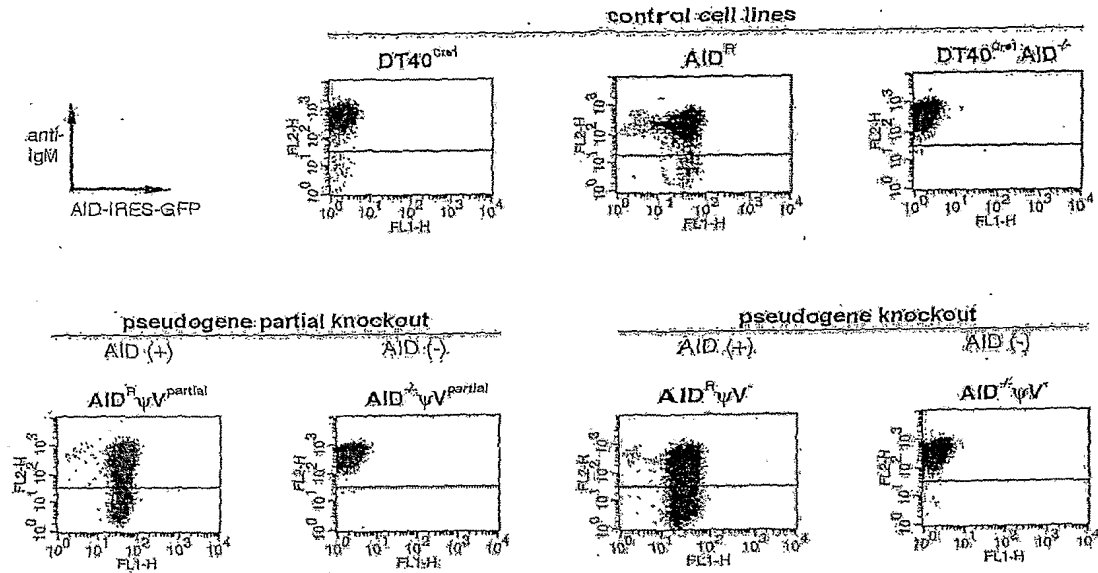


Figure 1

A



B

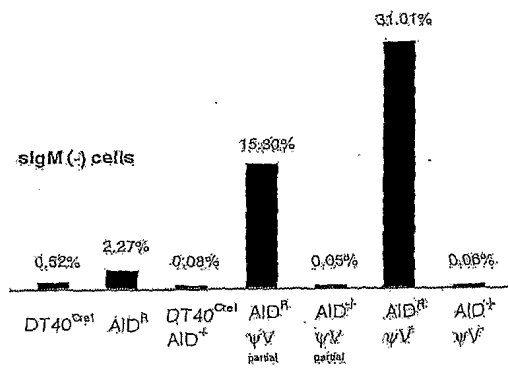


Figure 2

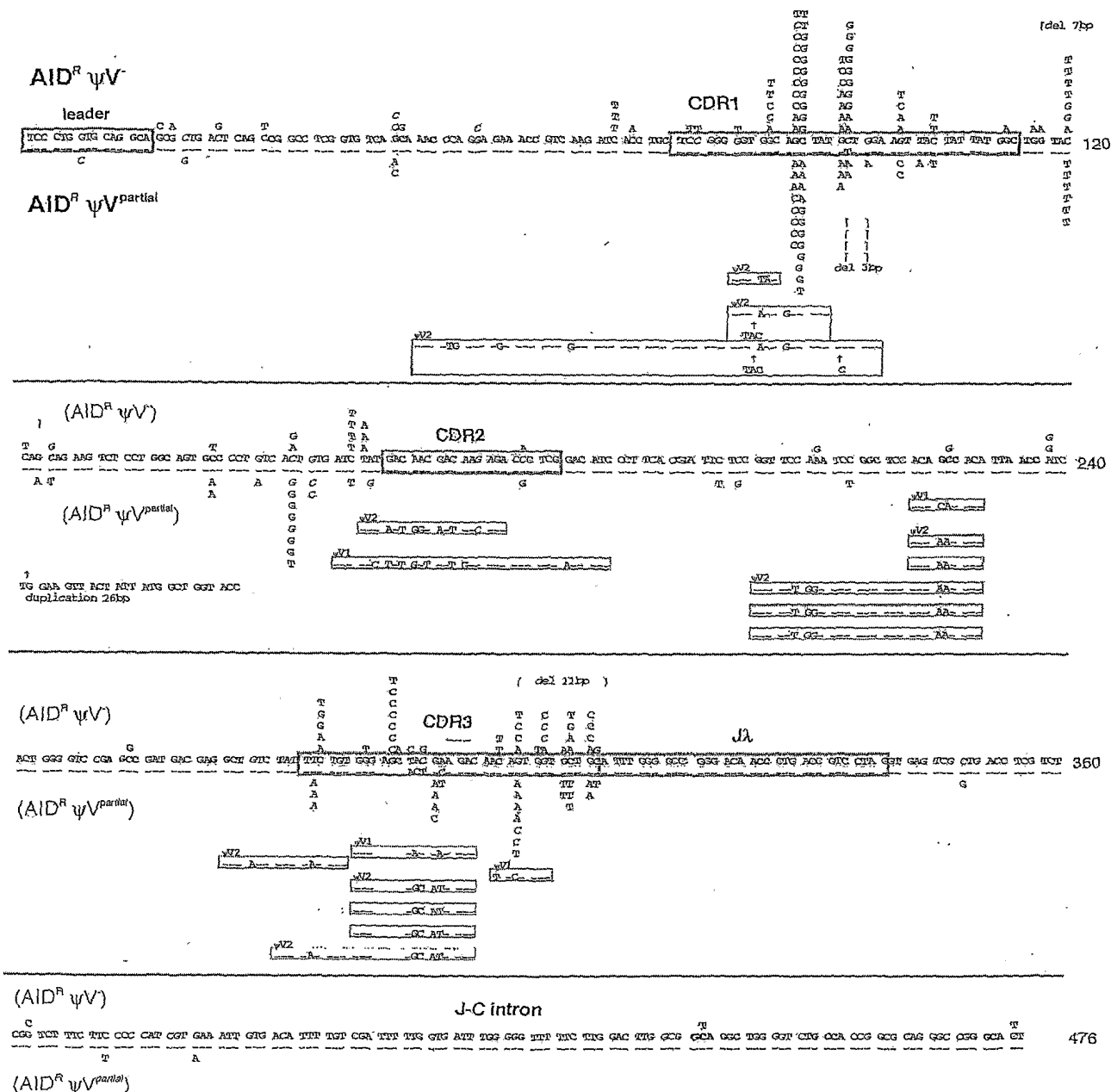


Figure 3

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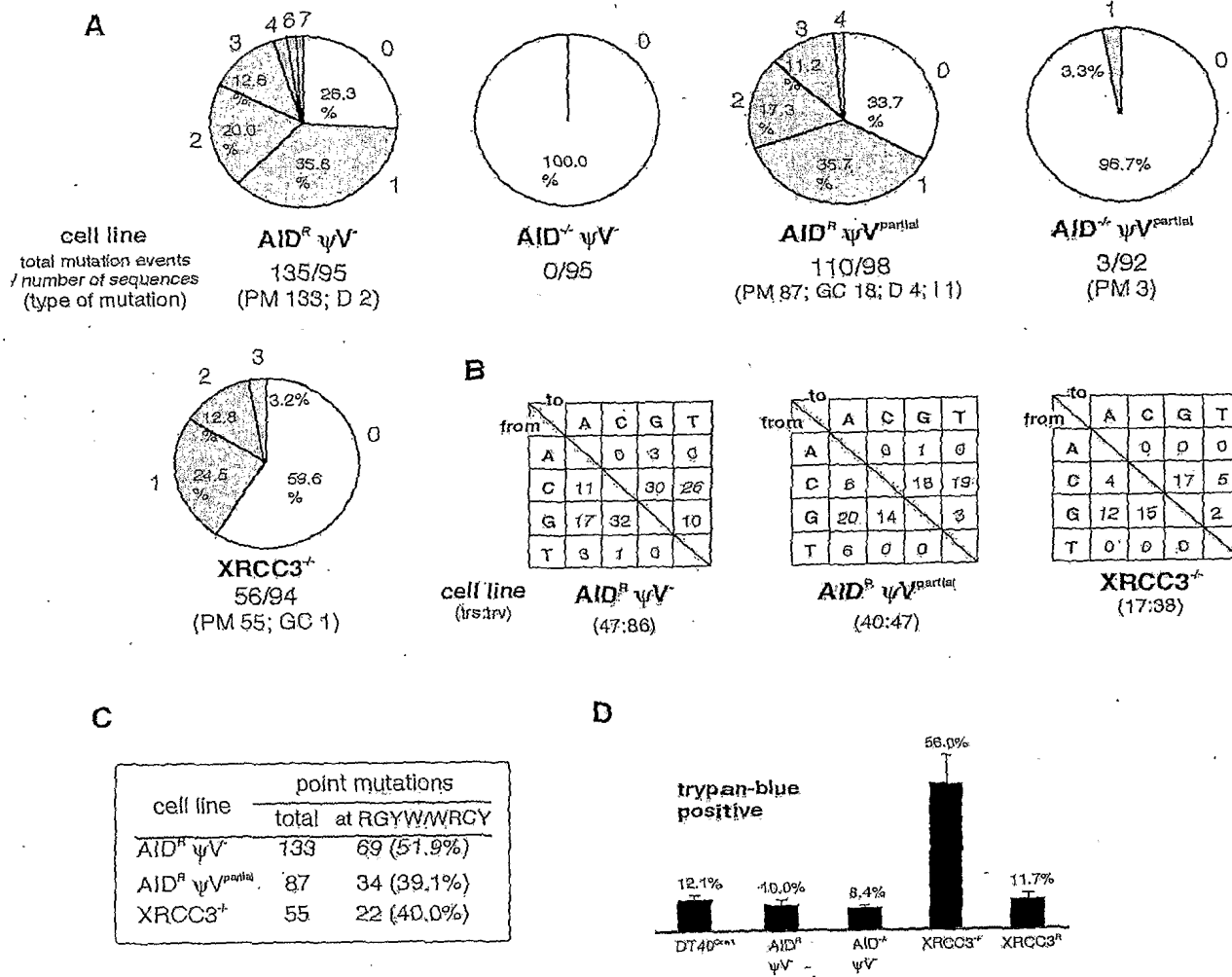


Figure 4

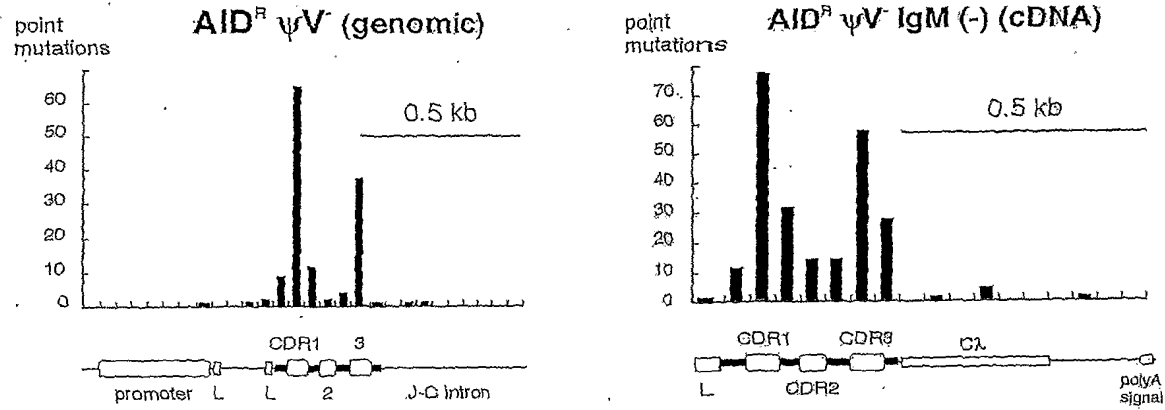


Figure 5

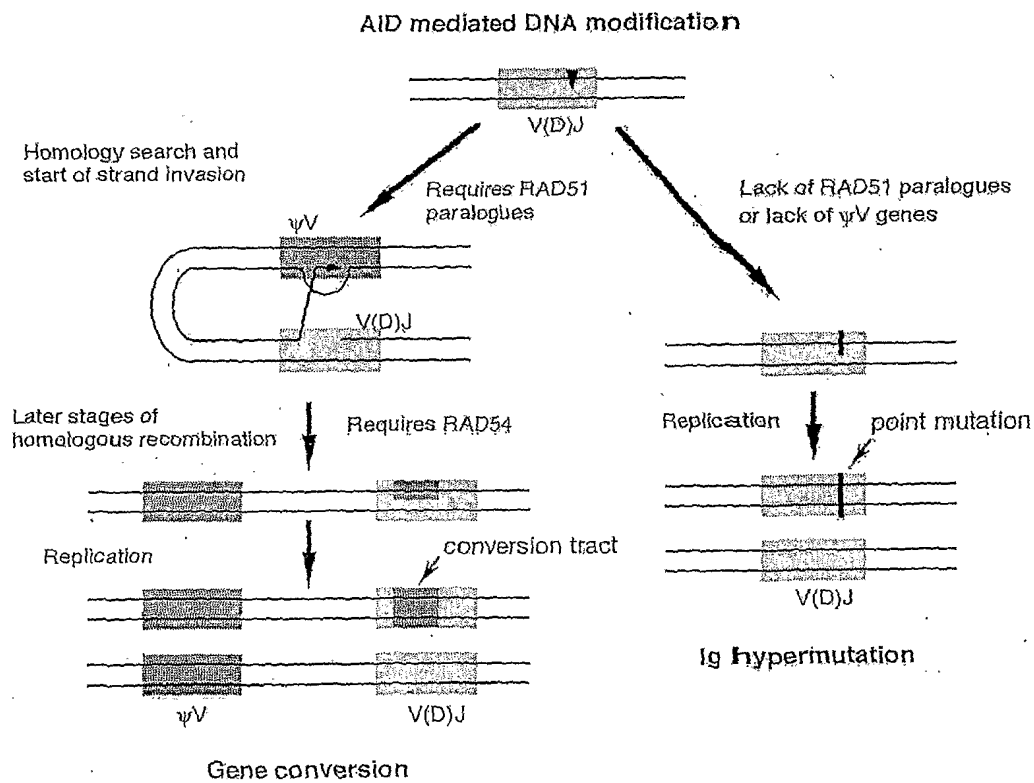


Figure 6

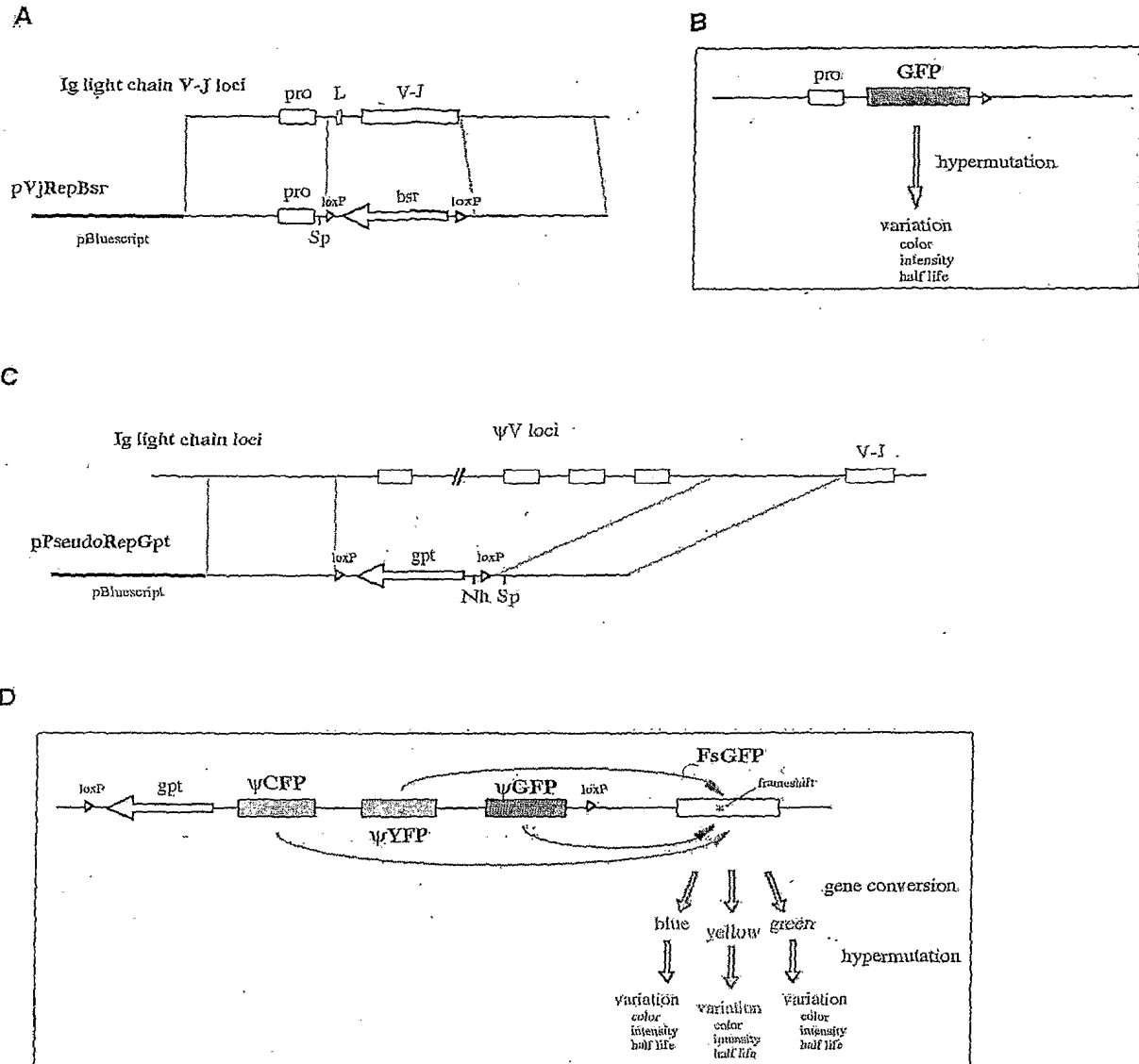


Figure 7